THEMATIC VEHICLE INTERIOR

DESCRIPTION

TECHNICAL FIELD

(Para 1) The present invention relates generally to vehicle passenger cabins, and more particularly to a vehicle passenger cabin that provides auditory sounds and visual features for creating a predetermined theme while notifying the vehicle occupant of one or more vehicle conditions.

BACKGROUND OF THE INVENTION

(Para 2) Automotive manufacturers currently produce vehicles having passenger cabins with various kinds of cosmetic trim. Typically, the cosmetic trim is substantially uniform throughout each passenger cabin so as to create a specific style. For instance, a well-appointed luxury car can include leather seats, wood-trimmed doors, a wood-trimmed steering wheel, a wood-trimmed gear shift, and a wood-trimmed dashboard fascia. Also, a typical sports car can include two-tone leather seats, metallic dashboard fascia, a leather-trimmed steering wheel, and a leather-trimmed gear shift.

(Para 3) Moreover, these vehicles typically include substantially similar warning systems for alerting an occupant when the warning systems detect predetermined vehicle conditions. For example, the warning systems of various cars typically play a generic chime when the warning systems detect that a vehicle door is open and a key has been left in the ignition. However, it is also understood that the warning systems typically utilize generic chimes for indicating a variety of other vehicle conditions. In addition, it will also be appreciated that these warning systems are integrated within various other kinds of vehicles besides luxury cars and sports cars.

(Para 4) It would therefore be desirable to provide thematic vehicle passenger cabin that coordinates a warning system and a cosmetic trim of the interior so as to provide a predetermined theme.

SUMMARY OF THE INVENTION

(Para 5) In one advantageous embodiment of the claimed invention, a thematic vehicle interior is provided. The thematic vehicle interior is comprised of a passenger cabin, a cosmetic trim for attachment to the vehicle within the passenger cabin, and a feedback system for playing one or more audio programs. The audio programs are utilized in combination with the cosmetic trim for creating a predetermined theme. Additionally, the audio programs are also utilized for indicating one or more predetermined vehicle conditions. The vehicle conditions include one or more of the following: an open-door condition, a low-fuel condition, a maintenance-required condition, a low-tire-pressure condition, a headlights-on condition, a key-in-the-ignition condition, an unfastened-seatbelt condition, an engine-start condition, and an engine-shut-off condition. Also, the thematic vehicle interior includes a sensor for detecting a vehicle condition and actuating the feedback system to play the audio program.

(Para 6) One advantage of the present invention is that a thematic vehicle interior is provided that harmonizes both visual features and auditory sounds so as to create a predetermined theme within the vehicle.

(Para 7) Another advantage of the present invention is that a thematic vehicle interior is provided that differentiates the vehicle from other competing vehicles.

(Para 8) Yet another advantage of the present invention is that a thematic vehicle interior is provided that immediately alerts vehicle occupants of one or more predetermined vehicle conditions.

(Para 9) Other advantages of the present invention will become apparent when viewed in light of the detailed description of the invention when taken in conjunction with the attached drawings and appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

(Para 10) For a more complete understanding of this invention, reference should now be made to the embodiments illustrated in greater detail in the accompanying drawings and described below by way of examples of the invention:

(Para 11) FIGURE 1 is a representative diagram of a thematic vehicle interior, according to one advantageous embodiment of the claimed invention; and

(Para 12) FIGURE 2 is a representative diagram of a thematic vehicle interior, according to another advantageous embodiment of the claimed invention.

DETAILED DESCRIPTION OF THE INVENTION

(Para 13) In the following figures, the same reference numerals are used to identify the same components in the various views. Furthermore, the illustrated embodiments described herein employ features where the context permits. Specifically, the embodiments described herein implement a thematic vehicle interior for an automobile. However, it is contemplated that the thematic vehicle interior can be utilized in a variety of other suitable environments, e.g. various watercrafts and aircrafts. In addition, other embodiments are contemplated having different combinations of the described features, having features other than those described herein, or lacking one or more of those features. For these reasons, it is understood that the invention can be carried out in a variety of suitable modes.

(Para 14) Referring to Figure 1, there is shown a representative diagram of a thematic vehicle interior ("interior") 10 of an automobile 12, according to one advantageous embodiment of the claimed invention. The interior 10 is a passenger cabin having various vehicle components with predetermined cosmetic trim 14. For example, in this embodiment, the interior 10 is a luxuriously-appointed passenger cabin with a wood-trimmed steering wheel, a wood-trimmed dashboard fascia, a wood-trimmed gear shifter mechanism, a wood-trimmed vehicle door, a wood-trimmed center console, a wood-trimmed overhead eyewear receptacle, a wood-trimmed overhead transmitter receptacle, a wood-trimmed overhead light device, or any suitable combination thereof.

(Para 15) However, it is contemplated that the interior 10 can include various other suitable vehicle components with a variety of other cosmetic trim as desired. For instance, in another embodiment, the interior 10 is a sports-car passenger cabin with metallic dashboard fascia, a metallic-trimmed gear shift, a leather-wrapped steering wheel, and two-toned leather seats.

(Para 16) Moreover, the interior 10 further includes a feedback system 16 for alerting the vehicle occupant of one or more predetermined vehicle conditions. Specifically, this feedback system 16 includes one or more sensors 18 and a feedback system 16 coupled to the sensors 18. These sensors 18 are utilized for detecting the predetermined vehicle conditions and actuating the feedback system 16 to play one or more audio programs. Examples of these

vehicle conditions include an open-door condition, a low-fuel condition, a maintenance-required condition, a low-tire-pressure condition, a headlights-on condition, a key-in-the-ignition condition, an unfastened-seatbelt condition, an engine-start condition, an engine-shut-off condition, various other suitable conditions, or any combination thereof. It will be appreciated that the feedback system 16 can be integrated within various other vehicles, e.g. watercraft, and therefore be utilized to indicate various other vehicle conditions.

(Para 17) One skilled in the art will appreciate that the feedback system 16 is a feedback system that is separate from a stereo system of the vehicle. However, it is contemplated that the feedback system 16 and the stereo system can be integrated into one system as desired.

(Para 18) The feedback system 16 includes a controller 20, which is coupled to and actuated by the sensors 18. This controller 20 is further coupled to a media player device 22 and a media storage device 24. The media storage device 24 is utilized for storing one or more audio programs that are assigned to one or more vehicle conditions. In this way, the controller 20 can actuate the media player device 22 to play a predetermined audio program for indicating, the detected vehicle condition.

(Para 19) In this embodiment, the controller 20 actuates the media player device 22 to play a series of audio programs with a variety of melodies and/or tones for indicating detected vehicle conditions. However, it is understood that the audio programs can instead vary according to volume, duration, or other suitable parameters as desired.

(Para 20) The audio programs preferably are related to the cosmetic trim of the passenger cabin so as to create a predetermined theme. For example, a vehicle interior 10 having a substantial amount of wooden trim includes a warning feedback system, which plays wooden-related audio programs. These wooden-related audio programs can be recordings from a xylophone, a tongue drum, a woodwind instrument, various other instruments related to wood, or any combination thereof. In this embodiment, a sensor 18 can detect that a door is ajar and send a corresponding signal to the controller 20. This controller 20 can then actuate the media player device 22 to play a predetermined audio program, e.g. a xylophone melody, assigned to an open-door condition. In that regard, the vehicle occupant can identify each audio program with its respective vehicle condition and immediately recognize the vehicle condition based only on the sound of the audio program.

(Para 21) By way of another example, other sensors 18 can simultaneously detect that the door is ajar and the key is left in the ignition. In response, the controller 20 can then actuate the media player device 22 to play

predetermined audio programs, e.g. a xylophone melody and a tongue drum rhythm, each assigned to its respective vehicle condition. It will be appreciated that the sensors 18 can detect various combinations of vehicle conditions and actuate the feedback system 16 to play a variety of audio programs for identifying those vehicle conditions.

(Para 22) In another embodiment, as explained above, the interior 10 is a sports-car passenger cabin with metallic dashboard fascia, a metallic-trimmed gear shift, a leather-wrapped steering wheel, and two-toned leather seats. This interior 10 includes a feedback system for playing sports-related audio programs. These sports-related audio programs include a golf-swing sound, a golf-putting sound, a whistle sound, a horn sound, a buzzer sound, a baseball-bat sound, a football-tackle sound, a cheering-crowd sound, an organ sound, various other sports-related sounds, or any combination thereof. As stated hereinabove, each audio program is assigned to a predetermined vehicle condition so as to quickly alert the vehicle occupant of the vehicle condition.

(Para 23) It is contemplated that various other suitable audio programs can be utilized as desired. For instance, for a sports car having passenger cabin with youth-related trim can include a feedback system 16 for playing sound bytes of popular music. Alternatively, the feedback system 16 can be utilized for playing sound bytes taken from movies, television shows, sports broadcasts, other media programs, or any combination thereof. In this way, it will be appreciated that the youth-related trim can be associated with various audio programs that typically appeals to a youthful demographic.

(Para 24) Referring now to Figure 2, there is shown the thematic vehicle interior 10, according to another advantageous embodiment of the claimed invention. In this embodiment, the interior 10 further includes an interface 26 coupled to the controller 20 of the feedback system 16 for allowing a vehicle occupant to assign a particular audio program to a given vehicle condition. In this way, the interface 26 allows a vehicle occupant to customize the kinds of audio programs that are utilized for indicating the predetermined vehicle conditions.

(Para 25) Also in this embodiment, the media storage device 24 of the feedback system 16 is coupled to an input device 28 for receiving supplemental audio programs therefrom. The input device 28 is a CD player, an MP3 player, a microphone, a stereo system of the vehicle, a wireless radio frequency communication device various other media, or any combination thereof.

(Para 26) While particular embodiments of the invention have been shown and described, numerous variations and alternate embodiments will occur to

those skilled in the art. Accordingly, it is intended that the invention be limited only in terms of the appended claims.